

## ABSTRACT

[00118] An apparatus and methods of using the same for transferring functional blocks to a substrate. In one exemplary embodiment, a plurality of functional blocks is deposited in a relocating tool having a first plurality of receptor sites. A transfer tool having a plurality of nozzles in aligning with the first plurality of receptor sites removes the plurality of functional blocks from the relocating tool. The transfer tool then deposits the plurality of functional blocks into a second plurality of receptor sites in a substrate. The receptor sites comprise adhesives for securing the functional blocks. Vibration and water are used to facilitate proper delivery of the functional blocks to the receptor sites.